



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,190	06/20/2003	Keith J. Brodic	M-15536-3C US	8790

32605	7590	10/05/2007
MACPHERSON KWOK CHEN & HEID LLP		
2033 GATEWAY PLACE		
SUITE 400		
SAN JOSE, CA 95110		

EXAMINER	
MANCHO, RONNIE M	

ART UNIT	PAPER NUMBER
3663	

MAIL DATE	DELIVERY MODE
10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/600,190	Applicant(s) BRODIE, KEITH J.	
	Examiner Ronnie Mancho	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6611757; claims 1-20 of U.S. Patent No. 6427121; claims 1-11 of U.S. Patent No. 6301545. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure of the claimed subject matter of the present application is disclosed in the above named patents. As an example, the above named patents all disclose an interrogator and a transponder which are capable of performing the steps disclosed in the present application..

3. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 2002/0138199, and claims 1-23 of copending Application No. 2001/0039475. Although the

Art Unit: 3663

conflicting claims are not identical, they are not patentably distinct from each other because the claims of the application encompass the claims of the PG publication.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

4. Amendments to the specification have been entered.

Claim Objections

5. Claim 1 is objected to because of the following informalities:

Claim 1 is replete with grammatical errors. As an example, in line 6 of claim 1, applicant is requested to change, "including a pseudorandom noise (PRN) code number, a Doppler frequency offset" to --including: a pseudorandom noise (PRN) code number, a Doppler frequency offset--, semicolon emphasized. Applicant is further required to replace the first and second occurrence of the term, "and" with a comma, ",", each in line 7, etc. Applicant should follow the example demonstrated in the claims set forth in the office action for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3663

7. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, the limitation, "correlator sums" is new matter because the original disclosure does not recite the phrase. Applicant's original disclosure recites, "*a set of fixed point correlator sums*" which is completely different from "correlator sums".

In claim 5, the phrase, "standby circuit" is new matter because the original disclosure does not recite the phrase. The original disclosure *particularly* called for, "passive standby circuit" not just any other "standby circuit".

The rest of the claims are rejected for depending on a rejected base claim.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what all is meant and encompassed by the phrase, "the correlation snap shot comprises *a range offset in chips*". The phrase, "a range offset" used in conjunction with the term, "chips" is not known in the art and confuses the scope of the claim. Although the specification discloses the above claimed phrase, there is no explanation of the

Art Unit: 3663

meaning of "a range offset in chips". The rest of the claims are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

11. Claims 1-3, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner (5781156)

Regarding claim 1, Krasner discloses a communications system (fig. 1A) for determining the position of an object (20, mobile remote unit), said system comprising:

an interrogator (10, base or reference station) remote from the object (object, col. 4, lines 29-39; pager system, col. 6, lines 16-27), the interrogator including circuits that:

receive GPS signals from GPS satellites (see GPS antenna 12, fig. 1; col. 7, lines 57-60);

for one of the GPS satellites associated with the GPS signals, transmit pre-positioning data (i.e. positioning data e.g. Doppler shifts, pseudorange in col. 6, line 25, etc are pre-established or computed first by the interrogator i.e. base station 10 and sent to the object 20 before an accurate position of the object 20 is computed using the pre-computed sent data. See data link 16, fig. 1A) for the GPS satellite, including:

Art Unit: 3663

a pseudorandom noise (PRN) code number (see unique Gold code or C/A code for civilian applications, col. 2, lines 2-14, i.e. each satellite is given a number or unique Gold code for identification of that particular satellite; col. 11, lines 17-21; col. 5, lines 66 to col. 6, lines 1-2),

a Doppler frequency offset (col. 11, lines 60-66),

a code phase offset (col. 11, lines 28-35; col. 5, lines 66 to col. 6, lines 1-2),

a tracking signal (see satellite identity, col. 6, lines 21-26; col. 11, lines 61-66)

including reference time (epoch, col. 5, lines 66 to col. 6, lines 1-2),

and frequency information (col. 11, lines 17-20; col. 5, lines 66 to col. 6, lines 1-10);

determine a pseudorange (col. 11, lines 28-35) associated with a received correlation snapshot (a snap shot is the collection of data such as PRN or PN frames in a given period of time; col. 11, lines 28-35; col. 12, lines 10-12), wherein the correlation snap shot comprises correlator sums and a range offset in chips;

a transponder (mobile unit 20 is positioned on or carried by an object since it is mobile) positioned on the object (object, col. 4, lines 29-39; pager system, col. 6, lines 16-27; col.) and including circuits that:

receive (i.e. at 26, 22) the pre-positioning data and the tracking signal (see data link 16, fig. 1A; col. 11, lines 61 thru col. 12);

collect RF samples of the GPS signals (col. 11, lines 61 thru col. 12);

correlate (col. 12, lines 61-67) the RF samples of the GPS signals against replicas of the GPS signals based on the PRN code number, the Doppler frequency offset,

the code phase offset in the pre-positioning data, the reference time, and frequency information in the tracking signal to produce the correlation snapshot (col. 1, lines 66 thru col. 2, lines 1+; col. 12, lines 61+); and

transmit (fig. 3, col. 12, lines 49 thru col. 13, lines 1+) the correlation snapshot to the interrogator (10, base or reference station).

Regarding claim 2, Krasner discloses the system of claim 1 wherein the transponder (all the circuit blocks disposed on mobile unit 20) comprises a two-bit (e.g. 1 or 0; col. 10, lines 37-40; fig. 2A) sampler for collecting the RF samples.

Regarding claim 3, Krasner discloses the system of claim 1 wherein the interrogator 10 is further adapted to transmit a wake-up signal (command to initialize, col. 11, lines 61-65; initialization data, col. 6, lines 16-30) prior to transmitting the pre-positioning data and the tracking signal, and the transponder (i.e. all the circuit blocks disposed on mobile unit 20) comprises:

processing circuitry (fig. 1A); and

a power subsystem adapted to maintain the processing circuitry in a power-off mode prior to receipt of the wake-up signal (col. 5, lines 39-51).

Regarding claim 8, Krasner discloses the system of claim 1 wherein the code replicas (col. 12, lines 7-28; see repetitive signal; col. 1, lines 65 thru col. 2, lines 1-25) are generated by

Art Unit: 3663

the transponder (i.e. all the circuit blocks disposed on mobile unit 20) at regular offsets (repetition period of 1023 chips, col. 2, lines 6) of some fraction of a C/A code chip.

In claims 1-8, the statements of intended use or field of use, "receive..... from", "associated with the", "transmit....for the", "determine a... associated with", "collect...of the", "correlate.... of the ", "transmit a prior to", "adapted to". "adapted to maintain", "switched off and ON by", etc clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim.

The disclosed prior art is capable of performing the above mentioned method or intended use limitations. Applicant may overcome the MPEP 2114 rejections by using language such as -
- configured to --.

Response to Arguments

12. Applicant's arguments filed 7/31/07 have been fully considered but they are not all persuasive.

Art Unit: 3663

It is noted that applicant has not amended the claims. Applicant is merely advancing the same arguments in different formats.

As an example arguments drawn to “correlations sums”, “chips”, passive stand by circuit”, etc have been all repeated in a different format. These arguments are not convincing. As such the response set forth in the last office action are repeated below. The applicant is arguing that the terms “correlation sums” and “chips” are terms readily understood in the art. It is noted that although the terms are known in the art, applicant’s original disclosure instead calls for the terms “*a set of fixed point correlator sums*” and “*passive standby circuit*” which are different from “correlation sums” and “chips”. Applicant has not provided the basis or meaning for the phrase, “*a set of fixed points*” in the claimed “*a set of fixed point correlator sums*”. Applicant has also not provided the basis or meaning for the phrase, “passive” in the claimed “passive standby circuit”. Applicant’s arguments are focused on new terms not found in the original disclosure.

It is not understood how applicant admits that the limitation, “range offset in chips” is well known in the art and then traverses the rejection and citing that the prior art does not disclose the limitation? Applicant’s reference made to Nokia Pat, # 7142589 is not on point since applicant is making reference to a completely different limitation not found in the claims. As already pointed out above the claimed limitations, “*a set of fixed point correlator sums*” and “*passive standby circuit*” are completely different from “correlation sums” and “chips”.

If applicant is relying on the above cited Nokia reference, then applicant should submit an information disclosure form for consideration by the examiner.

Art Unit: 3663

Applicant further argues that “fixed point correlation sums” and the term, “passive standby circuit” are not essential features of the claim is not convincing. Applicant further states that there is no indication what so ever in the disclosure that insists that these limitations are essential features of the claims. The examiner notes that applicant sets forth no express statement to indicate that these limitations should not be considered as part of the invention. If the limitations are not part of the invention, then applicant may delete the limitations from the claims. Applicant’s cited page 9, lines 19-23 of the specification do not distinctly or expressly set forth the meaning of “fixed point”. It is further noted that applicant’s claimed “PASSIVE standby circuit” is different from an ordinary --standby circuit--

Applicants argument with reference to car brakes is off point and has no bearing to the invention.

Applicant’s argues the prior art Krasner does not anticipate the claims because Krasner discloses that the mobile units may be up to 150 km away from the base station. The argument is not convincing. Whether the mobile units are 150 km away or not, Krasner anticipates the claim limitation. As a matter of fact, Krasner anticipates the invention since applicant admits that the approximate positions of the mobile units are known as indicated in the arguments. How can applicant admit that the limitations are well known in the prior art and then deny that the prior art, Krasner does not anticipate the limitations.

Applicant further argues that the limitations of the claims are NOT MERELY statements of intended use. The examiner disagrees. It is noted that in claim 1, the only structures disclosed therein are generally circuits and satellites. The rest of the limitations are method steps, functional limitations, or intended use limitations. Applicant does not claim for example a

Art Unit: 3663

receiver configured to receive, circuits configured to: receive, correlate, transmit, etc to overcome MPEP 2114 and MPEP 2115.

The amendments to the specification are accepted and will be entered.

The cited sections in the prior art anticipate the claims as pointed out above. It is further noted that even if the prior art did not teach the contended method steps, which the examiner is not conceding, the prior art is only required to be capable of performing the contended limitations in applicant's apparatus claims.

The rejections are proper and thus stand.

Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho
Examiner
Art Unit 3663

9/28/2007


JACK KEITH
SUPERVISORY PATENT EXAMINER